

CLAIMS

What is claimed is:

1. A method of operating on a virtual content repository (VCR) that represents a plurality of content repositories, comprising:
 - creating a node, wherein the node has an identifier that indicates a location of the node in said VCR;
 - associating the node with at least one of: 1) a property; and 2) a schema;
 - storing the node in said VCR; and
 - wherein storing the node in said VCR will result in the at least one property and/or schema being stored in one of said plurality of content repositories.
2. The method of claim 1 wherein:
 - the property is an association between a name and at least one value.
3. The method of claim 2 wherein:
 - the at least one value can be a text string, a number, an image, an audio/visual presentation, or binary data.
4. The method of claim 1 wherein:
 - each one of the plurality of content repositories exposes a first set of services to enable its integration into the VCR.
5. The method of claim 1 wherein:
 - the schema includes at least one property definition.
6. The method of claim 5 wherein:
 - a property definition can specify at least one of the following for a property:
 - property choices;
 - a reference;
 - a data type;
 - whether the property is mandatory;
 - whether the property is multi-valued;
 - whether the property is primary;

whether the property is read-only; and
whether the property is restricted.

7. The method of claim 5 wherein:
there is one property definition for each property associated with the node.
8. The method of claim 1 wherein:
the node can be hierarchically related to other nodes in the VCR.
9. A method of operating on a virtual content repository (VCR) that represents a plurality of content repositories, comprising:
obtaining a node from said VCR, wherein the node has an identifier that indicates a location of the node in said VCR;
wherein the node is associated with information that includes at least one of:
1) a property; and 2) a schema;
wherein the node information is stored in at least one of said plurality of content repositories; and
wherein each one of the plurality of content repositories exposes a first set of services to enable its integration into the VCR.
10. The method of claim 9 wherein:
a property is an association between a name and at least one value.
11. The method of claim 10 wherein:
the at least one value can be a text string, a number, an image, an audio/visual presentation, or binary data.
12. The method of claim 9 wherein:
the identifier is a path.
13. The method of claim 9 wherein:
a schema includes at least one property definition.
14. The method of claim 13 wherein:

a property definition can specify at least one of the following for a property:

- property choices;
- a reference;
- a data type;
- whether the property is mandatory;
- whether the property is multi-valued;
- whether the property is primary;
- whether the property is read-only; and
- whether the property is restricted.

15. The method of claim 13 wherein:
there is one property definition for each property associated with the node.
16. The method of claim 9 wherein:
the node can be hierarchically related to other nodes in the VCR.
17. A method of operating on a virtual content repository (VCR) wherein the VCR has a node and wherein said node is associated with information, said method comprising:
obtaining said node, wherein said node has an identifier that indicates a unique location in said VCR;
performing an operation on said node, wherein the operation is one of: 1) deleting said node; 2) changing the location of said node in the VCR; 3) reading said information; and 4) updating said information;
wherein the VCR represents a plurality of content repositories; and
wherein the information includes at least one of: 1) a property; and 2) a schema.
18. The method of claim 17 wherein:
a property is an association between a name and at least one value.
19. The method of claim 18 wherein:
the at least one value can be a text string, a number, an image, an audio/visual presentation, or binary data.

20. The method of claim 17 wherein:
each one of the plurality of content repositories exposes a first set of services to enable its integration into the VCR.
21. The method of claim 17 wherein:
a schema includes at least one property definition.
22. The method of claim 21 wherein:
a property definition can specify at least one of the following for a property:
property choices;
a reference;
a data type;
whether the property is mandatory;
whether the property is multi-valued;
whether the property is primary;
whether the property is read-only; and
whether the property is restricted.
23. The method of claim 21 wherein:
there is one property definition for each property associated with said node.
24. The method of claim 17 wherein:
said node can be hierarchically related to other nodes in the VCR.
25. A computer data signal embodied in a transmission medium, comprising:
a code segment including instructions for obtaining a node, wherein the node has an identifier that indicates a unique location in a virtual content repository (VCR), and wherein the node is associated with information that includes at least one of: 1) a property; and 2) a schema;
a code segment including instructions for performing an operation on the node, wherein the operation is one of: 1) deleting the node; 2) changing the location of the node in the VCR; 3) reading the information; and 4) updating the information; and

wherein the VCR represents a plurality of content repositories.

26. The computer data signal of claim 25 wherein:
the property is an association between a name and at least one value.
27. The computer data signal of claim 26 wherein:
the at least one value can be a text string, a number, an image, an audio/visual presentation, or binary data.
28. The computer data signal of claim 25 wherein:
each one of the plurality of content repositories exposes a first set of services to enable its integration into the VCR.
29. The computer data signal of claim 25 wherein:
a schema includes at least one property definition.
30. The computer data signal of claim 29 wherein:
a property definition can specify at least one of the following for a property:
 - property choices;
 - a reference;
 - a data type;
 - whether the property is mandatory;
 - whether the property is multi-valued;
 - whether the property is primary;
 - whether the property is read-only; and
 - whether the property is restricted.
31. The computer data signal of claim 29 wherein:
there is one property definition for each property associated with the node.
32. The computer data signal of claim 25 wherein:
the node can be hierarchically related to other nodes in the VCR.
33. A system comprising:

means for obtaining a node, wherein the node has an identifier that indicates a unique location in a virtual content repository (VCR), and wherein the node is associated with information;

means for performing an operation on the node, wherein the operation is one of: 1) deleting the node; 2) changing the location of the node in the VCR; 3) reading the information; and 4) updating the information;

wherein the VCR represents a plurality of content repositories; and

wherein the information includes at least one of: 1) a property; and 2) a schema.

34. The system of claim 33 wherein:

the property is an association between a name and at least one value.

35. The system of claim 34 wherein:

the at least one value can be a text string, a number, an image, an audio/visual presentation, or binary data.

36. The system of claim 33 wherein:

each one of the plurality of content repositories exposes a first set of services to enable its integration into the VCR.

37. The system of claim 33 wherein:

a schema includes at least one property definition.

38. The system of claim 37 wherein:

a property definition can specify at least one of the following for a property:

property choices;

a reference;

a data type;

whether the property is mandatory;

whether the property is multi-valued;

whether the property is primary;

whether the property is read-only; and

whether the property is restricted.

39. The system of claim 37 wherein:
there is one property definition for each property associated with the node.
40. The system of claim 33 wherein:
the node can be hierarchically related to other nodes in the VCR.
41. A machine readable medium having instructions stored thereon that when executed by a processor cause a system to:
obtain a node, wherein the node has an identifier that indicates a unique location in a virtual content repository (VCR), and wherein the node is associated with information;
perform an operation on the node, wherein the operation is one of: 1) deleting the node; 2) changing the location of the node in the VCR; 3) reading the information; and 4) updating the information;
wherein the VCR includes a plurality of content repositories; and
wherein the information includes at least one of: 1) a property; and 2) a schema.
42. The machine readable medium of claim 41 wherein:
the property is an association between a name and at least one value.
43. The machine readable medium of claim 42 wherein:
the at least one value can be a text string, a number, an image, an audio/visual presentation, or binary data.
44. The machine readable medium of claim 41 wherein:
each one of the plurality of content repositories exposes a first set of services to enable its integration into the VCR.
45. The machine readable medium of claim 41 wherein:
the schema includes at least one property definition.
46. The machine readable medium of claim 45 wherein:

a property definition can specify at least one of the following for a property:

- property choices;
- a reference;
- a data type;
- whether the property is mandatory;
- whether the property is multi-valued;
- whether the property is primary;
- whether the property is read-only; and
- whether the property is restricted.

47. The machine readable medium of claim 45 wherein:
there is one property definition for each property associated with the node.
48. The machine readable medium of claim 41 wherein:
the node can be hierarchically related to other nodes in the VCR.